

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-7 (canceled)

Claim 8 (original): A rotary compressor comprising:

an electric element, and first and second rotary compression elements driven by the electric element, these components being provided in a hermetically sealed container, CO₂ refrigerant gas compressed by the first rotary compression element being discharged into the hermetically sealed container, and the discharged refrigerant gas of intermediate pressure being further compressed by the second rotary compression element;

a cylinder constituting the second rotary compression element;

a support member adapted to seal an opening surface of the cylinder, and provided with a bearing of a rotary shaft erected on a center part;

a discharge muffler chamber formed in the support member outside the bearing, and communicated with an inside of the cylinder;

a cover having a peripheral part fixed to the support member by a bolt to seal an opening of the discharge muffler chamber;

a gasket held between the cover and the support member; and

an O ring provided between an inner peripheral end surface of the cover and an outer peripheral surface of the bearing.

Claim 9 (currently amended): A rotary compressor comprising:

an electric element, and first and second rotary compression elements driven by the electric element, these components being provided in a hermetically sealed container, CO₂ refrigerant gas compressed by the first rotary compression element being discharged into the hermetically sealed container, and the discharged refrigerant gas of intermediate pressure being further compressed by the second rotary compression element;

a cylinder constituting the second rotary compression element;

a support member adapted to seal an opening surface of the cylinder on the electric element side, and provided with a bearing of a rotary shaft erected on a center part;

a discharge muffler chamber formed in the support member outside the bearing, and communicated with an inside of the cylinder; and

a cover attached to the support member to seal an opening of the discharge muffler chamber,

wherein a thickness dimension of the cover is set to $[[\geq]]$ greater than or equal to 2 mm
 $[[\leq]]$ and less than equal to 10 mm.

Claim 10 (original): The rotary compressor according to claim 9, wherein a thickness of the cover is set to 6 mm.

Claim 11 (original): The rotary compressor according to claim 9 or 10, wherein the cover has a peripheral part fixed to the support member by a bolt, a gasket is held between the cover

and the support member, and an O ring is provided between an inner peripheral end surface of the cover and an outer surface of the bearing.

Claim 12 (original): A rotary compressor comprising:

an electric element, and first and second rotary compression elements driven by the electric element, these components being provided in a hermetically sealed container, CO₂ refrigerant gas compressed by the first rotary compression element being discharged into the hermetically sealed container, and the discharged refrigerant gas of intermediate pressure being further compressed by the second rotary compression element;

a cylinder constituting each rotary compression element;

a support member adapted to seal an opening surface of each cylinder, and provided with a bearing of a rotary shaft erected on a center;

a discharge muffler chamber formed in the support member outside the bearing, and communicated with an inside of the cylinder; and

a cover attached to the support member to seal an opening of the discharge muffler chamber,

wherein each cylinder, each support member and each cover are fastened by a plurality of main bolts, and each cylinder and each support member are fastened by auxiliary bolts located outside the main bolts.

Claim 13 (original): The rotary compressor according to claim 12, further comprising a roller engaged with an eccentric portion formed in the rotary shaft of the electric element, and eccentrically rotated in the cylinder constituting the second rotary compression element, a vane abutted on the roller to divide an inside of the cylinder into a low pressure chamber side and a high pressure chamber side, and a guide groove formed in the cylinder to house the vane, wherein the auxiliary bolts are positioned near the guide groove.

Claims 14 -28 (canceled)

Claim 29 (currently amended): A rotary compressor comprising:
an electric element, and a rotary compression element driven by the electric element, both components being provided in a hermetically sealed container;
a single or a plurality of cylinders constituting the rotary compression element;
a first support member adapted to seal an opening surface of the cylinder on the electric element side, and provided with a bearing of a rotary shaft of the electric element;
a second support member adapted to seal an opening surface of the cylinder not on the electric element side, and provided with a bearing of the rotary shaft; and
a carbon bush provided between one of the bearings of the first and second support members and the rotary shaft.

Claim 30 (original): The rotary compressor according to claim 29, wherein the bush is provided in the bearing of the first support member.

Claim 31 (original): A rotary compressor comprising:

an electric element, and first and second rotary compression elements driven by the electric element, both components being provided in a hermetically sealed container, gas compressed by the first rotary compression element being discharged into the hermetically sealed container, and the discharged gas of intermediate pressure being further compressed by the second rotary compression element;

first and second cylinders respectively constituting the first and second rotary compression elements;

a first support member adapted to seal an opening surface of the first cylinder, and provided with a bearing of a rotary shaft of the electric element;

a second support member adapted to seal an opening surface of the second cylinder, and provided with a bearing of the rotary shaft; and

a carbon bush provided between one of the bearings of the first and second support members and the rotary shaft.

Claim 32 (original): The rotary compressor according to claim 31, wherein the bush is provided in the bearing of the second support member.

Claim 33 (original): The rotary compressor according to any one of claims 29 to 32, wherein the rotary compression element compresses CO₂ gas as a refrigerant.

Claim 34-44 (canceled)

Claim 45 (new): The rotary compressor according to claim 8, wherein no sealing surfaces are formed on a base of the bearing.

Claim 46 (new): The rotary compressor according to claim 45, wherein the cover is not fixed to the bearing by a C ring.

Claim 47 (new): The rotary compressor according to claim 11, wherein no sealing surfaces are formed on a base of the bearing.

Claim 48 (new): The rotary compressor according to claim 47, wherein the cover is not fixed to the bearing by a C ring.

Claim 49 (new): The rotary compressor according to claim 32, wherein the compressor includes an oil reservoir, the first support member is adjacent to the oil reservoir, and no bushing is on the first support member.